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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,881	06/14/2006	Koichi Shibayama	MIY-0213	8694

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EXAMINER	
LACLAIR, DARCY D	

ART UNIT	PAPER NUMBER
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,881	SHIBAYAMA ET AL.	
	Examiner	Art Unit	
	Darcy D. LaClair	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) *1-4 and 7* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5,6 and 8-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-11* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. All outstanding rejections, except for those maintained below are withdrawn in light of the amendment filed on 11/18/2008.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 11/18/2008. In particular, **Claim 1** has been amended to recite shaping a material in a dye by transferring a shape of the die, the inorganic silica compound being at least one of silica and laminar silicate, and the laminar silicate having an average length of 0.01 to 3 μm. This limitation was not present in the claims at the time of the preceding Office Action. As the claims pending in this case depend from the limitations of this claim, the following action is properly made **FINAL**.

Election/Restrictions

2. Newly submitted claims 1-4 and 7 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 1-4 and 7 (Invention I), drawn to a process for a molded article which is shaped by molding, Classified in class 524, subclass 493, is patentably distinct from Claims 5-6 and 8-11 (Invention II), drawn to a substrate or film made from a thermosetting resin composition, classified in class 428, subclass 336.

It is noted that claims 5-6 and 8-11 are recited in product-by-process format. Pursuant to MPEP 806.05(f) where it is stated that "A product defined by the process by which it can be made is still a product claim (*In re Bridgeford*, 357 F.2d 679, 149 USPQ 55 (CCPA 1966)) and can be restricted from the process if the examiner can

demonstrate that the product as claimed can be made by another materially different process" it is appropriate to group claim(s) 5-6 and 8-11 as product claim(s).

The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the molded article can be made from a thermosetting resin composition blended in a mixer rather than a die and then molded. The process for molding a molded article could also be practiced with a thermosetting resin not containing an inorganic compound, or containing an inorganic compound which is carbon black.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1-4 and 7 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Double Patenting

3. **Claims 5-6 and 8-11** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **Claims 27-28** of **copending Application No. 10/433,956**. Although the conflicting claims are not identical, they are not patentably distinct from each other because these claims require

a substrate or film comprising the molded article obtained by the process for the molded article according to claim 1, 3 or 4. These claims are recited in format, and as such, the process limitations do not carry patentable weight.

It is noted that **Claim 5-6 and 8-11**, with respect to the process for the molded article, are stated in ***product-by-processes*** format.

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

The rejection is adequately set forth in **paragraphs 2-7** of the office action mailed 7/18/2008, and is incorporated here by reference.

Specification

4. The amendment filed 11/18/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

In paragraphs [0049] and [0057] applicant has amended the specification to replace "proper" with "optimized." These terms embody very different concepts. In order to support these amendments, a certified translation of the foreign priority document or PCT document is required to show that this amendment is supported.

Applicant is required to cancel the new matter or demonstrate support in the reply to this Office Action.

Claim Objections

5. **Claims 5-6, and 8-11** are objected to because of the following informalities:

Claims 5-6, and 8-11 recite "the process for the molded article." This is unclear. What process does this refer to? The language should indicate what action the process proposes to take, such as using, disposing of, obtaining, molding, or the like.

Claims 10 and 11 read "A film for substrates substrate comprising." This is awkward terminology. "A film for substrates, said substrate comprising" or "A film for substrates comprising" are suggested as less awkward alternatives. Appropriate correction is required.

Claims 9 and 11 are objected to under 37 CFR 1.75 as being a substantial duplicate of **Claims 5 and 6**, respectively.

Claim 5 requires "A substrate comprising the molded article obtained by the process for the molded article according to Claim 1 or 4." Claim 9 requires "A substrate comprising the molded article obtained by the process for the molded article according to Claim 4." Claim 6 requires "A film for substrates comprising the molded article obtained by the process for the molded article according to Claim 1 or 4." Claim 11 requires "A film for substrates substrate comprising the molded article obtained by the process for the molded article according to Claim 4." In both cases, the article depending from Claim 4 has already been covered in the earlier claims. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

6. **Claims 5-6 and 8-11** are rejected under 35 U.S.C. 102(b) as being anticipated by **Yonezawa et al**. (**WO 02/046312**)

It is noted that the international Patent Application WO publication is being utilized for date purposes. However, since WO 02/046312 is in Japanese, in the discussion below, the US equivalent for WO 02/046312, namely US 2004/0053061, respectively, is referred to in the body of the rejection below. All column and line citations are to the US equivalent.

The rejection is adequately set forth in **paragraphs 8-14** of the office action mailed **7/18/2008**, and is incorporated here by reference.

7. **Claims 5-6 and 8-11** are rejected under 35 U.S.C. 102(b) as being anticipated by **Shibayama et al.** (**JP 2003/313435**)

In setting forth this rejection, in the absence of a full English-Language translation of **JP 2003/313435**, a machine translation has been relied upon.

The rejection is adequately set forth in **paragraphs 16-21** of the office action mailed **7/18/2008**, and is incorporated here by reference.

Response to Arguments

Applicant's arguments filed **11/18/2008** have been fully considered. Specifically, applicant argues **(A)** the amendments to the specification have corrected the informalities and addressed the concerns raised in the prior office action, **(B)** Claims 2, 5, 6, and 8-11 have been amended to correct informalities noted in the previous office action, **(C)** The amendments to the claims render the nonstatutory obviousness-type double patenting rejection moot, **(D)** The amendments to the claims overcome the outstanding rejection by addressing the concern raised in the previous office action, and **(E)** the amendments to the claims overcome the outstanding rejection since the claims are now directed to a process for a molded article which is shaped by molding, with an important feature being the retention of the shape after molding, which is not taught by Yonezawa or Shibayama.

With respect to arguments (A), applicant's amendments have been considered and correct the informalities in the specification. The objections are therefore withdrawn; however applicant is directed to the objections set forth above with regard to the revised specification.

With respect to arguments (B), applicant's amendments have been considered. The objections with respect to the corrected informalities are withdrawn; however applicant is directed to the objections set forth above with regard to the revised claims.

With respect to argument (C), applicant's arguments have been considered, but are not persuasive. Specifically, **Claims 5-6** require a substrate comprising the

molded article obtained by the process for the molded article according to claim 1 or 4. These claims are recited in ***product-by-processes*** format, and as such, the process limitations do not carry patentable weight. The material for the substrate comprises 100 parts by weight of a thermosetting resin and 0.1 to 100 parts by weight of an inorganic compound which can be silica having a particle diameter of 2 μm or less, or laminar silicate having an average length of 0.01 to 3 μm (material of Claim 1), or specifically where the thermosetting resin is an epoxy (Claim 4).

Copending application **No. 10/433,956** requires 100 parts of epoxy resin, which is a thermosetting resin, and 0.1 to 50 parts by weight of a layered silicate. (See Claims 27-28) The claim requires that the interlaminar distances is 3 to 5 nm, and there are 5 or less layers. The specification indicates that this is found in a particle having an average length of 0.01 to 3 mm. (See copending specification, p. 19 line 30) Note MPEP 804: "Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970)." The subject matter of these claims falls within the scope of the instant application.

With respect to argument (D), applicant's arguments have been considered and the rejection the rejection under USC 112, second paragraph been withdrawn ***in light of applicant's amendment***, which provides a length for the laminar silicate. Support for the amendment in paragraph [0031] is acknowledged.

With respect to argument (E), applicant's arguments with respect to the anticipation rejections Claims 5-6 and 8-11 have been considered, but are not persuasive.

With regard to the rejection over Yonezawa et al., it is first noted that the claims at issue are written in product-by-process format, and as such the process limitations do not carry patentable weight. Never the less, Yonezawa appears to disclose the process limitations with respect to dispersing the inorganic compound in said thermosetting resin in a die by transferring a shape of the die. (See par [0135] in Yonezawa, and comparatively, see applicant's paragraph [0110]) It is noted that Claim 1 is written in somewhat convoluted language, so it is not immediately apparent whether the dispersed inorganic compound refers to the state of the material, or the action of the material traveling along the die. With regard to the change in shape following molding, Yonezawa teaches a material which exhibits excellent shape retention (see abstract). The thermosetting resins, in particular epoxy resins, are virtually identical to those disclosed by applicant. (See par [0042]-[0055] of Yonezawa and par [0065]-[0080] in applicant's specification. The layered silicate has an average length of 0.05 to 2 μm, (see par [0080]) which falls within, and therefore anticipates applicant's claimed range. Based on the similar resins and similar filler, the examiner takes the position that the same properties would be realized by the material taught by Yonezawa and the material claimed by applicant. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990)

With regard to the rejection over Shibayama et al., Shibayama appears to disclose the process limitations with respect to dispersing the inorganic compound in said thermosetting resin in a die by transferring a shape of the die. (See par [0111] in Shibayama, and comparatively, see applicant's paragraph [0110]) With regard to the change in shape following molding, Shibayama teaches a material which exhibits excellent shape retention (see abstract). The thermosetting resins, in particular epoxy resins, are virtually identical to those disclosed by applicant. (See par [0018]-[0031] of Shibayama and par [0065]-[0080] in applicant's specification. The layered silicate has an average length of 0.05 to 2 μm, (see par [0065]) which falls within, and therefore anticipates applicant's claimed range. Based on the similar resins and similar filler, the examiner takes the position that the same properties would be realized by the material taught by Shibayama and the material claimed by applicant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darcy D. LaClair whose telephone number is (571)270-5462. The examiner can normally be reached on Monday-Friday 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
Art Unit 1796

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